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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/645,896	08/25/2000	Jeffrey J. Gold	200223	6089
44702	7590	08/07/2006	EXAMINER	
OSTRAGER CHONG FLAHERTY & BROITMAN PC			STEVENS, THOMAS H	
250 PARK AVENUE, SUITE 825			ART UNIT	PAPER NUMBER
NEW YORK, NY 10177			2123	

DATE MAILED: 08/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/645,896	GOLD, JEFFREY J.	
Examiner	Art Unit		
Thomas H. Stevens	2123		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 11 May 2006.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-15 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-15 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a))

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____

DETAILED ACTION

1. Claims 1-15 were examined.

Section I: Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/11/2006 has been entered.

Section II: Non-Final Rejection

Provisional Statutory Double Patenting

3. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101, which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in

scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

4. Claim 13 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 13 of copending Application No. 11/431,984. Claim 13 of the present application teaches emulation comprising a spacecraft and a control client etc. while claim 13 of application number 11/431,984 denotes, verbatim, the same characteristics. Both applicants are analogous art regarding signal emulation between ground stations and spacecraft. Therefore, at the time of invention it would have been obvious to one of ordinary skill in the art that both claims are disclosing the same invention. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

6. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Gold et al. (U.S. Patent 6,684,182 (2004)). Gold et al. teaches a spacecraft emulation system. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Gold et al. that can emulate both the attitude control subsystem and the non-attitude control subsystem into a single compact unit (abstract).

Claim 1: A method of simulating the operation of a spacecraft (column 5, line 52) comprising the steps of requesting a connection to one of a plurality of simulated ground stations (column 6, lines 14-15); generating a range server name (as part of the TCP/IP address: column 3, lines 60-65); in response: other range server name (as part of the TCP/IP address: column 3, lines 60-65), generating server location parameters; instantiating a range server dedicated to a single ground station (column 5, lines 14-22); calculating range data for each of the plurality of simulated ground stations (inherent to

the function of simulating/emulating between ground and orbiter: column 6, lines 46-58; and column 3, lines 37-39); and, providing the range data for one of the plurality of simulated ground stations (inherent to the function of simulating/emulating between ground and orbiter: column 6, lines 46-58 and column 3, lines 37-39).

Claim 2: A method as recited in claim 1 (column 5, line 52; inherent to the function of simulating/emulating between ground and orbiter: column 6, lines 46-58) wherein the step of requesting comprises the step of requesting a connection to a simulated ground station from a spacecraft status and control client (column 5, lines 14-23).

Claim 3: A method as recited in claim 1 (column 5, line 52; inherent to the function of simulating/emulating between ground and orbiter: column 6, lines 46-58; column 5, lines 14-23) wherein the step of having a common IP address (column 3, lines 60-65), for the plurality of simulated ground stations while providing a unique port address for each simulated ground station (as part of the TCP/IP address: column 3, lines 60-65).

Claim 4: A method as recited in claim 1 (column 5, line 52; inherent to the function of simulating/emulating between ground and orbiter: column 6, lines 46-58; column 5, lines 14-23) wherein the step of requesting comprises requesting a connection to multiple ground stations, wherein each ground station (column 5, lines 14-22) has a unique port address and a common port IP address (multiple terminals, multiple stations, thus multiple IP address: column 5, lines 14-22).

Claim 5: A method as recited in claim 4 (column 5, line 52; inherent to the function of simulating/emulating between ground and orbiter: column 6, lines 46-58; column 5, lines 14-23) wherein the step of generating a range comprises generating the range server name in response to the unique port address and using that name to instantiate a range server specific to a unique ground station (multiple terminals, multiple stations, thus multiple IP address: column 5, lines 14-22).

Claim 6: A method as recited in claim 1 (column 5, line 52; inherent to the function of simulating/emulating between ground and orbiter: column 6, lines 46-58; column 5, lines 14-23; and column 6, lines 62-63) further comprising the step of providing tracking information for the one of the plurality of simulated ground stations (multiple terminals, multiple stations, thus multiple IP address: column 5, lines 14-22).

Claim 7: A method of simulating the operation of a spacecraft (column 5, line 52) comprising the steps of generating range (inherent to the function of simulating/emulating between ground and orbiter: column 6, lines 46-58 and column 3, lines 37-39), attitude (column 5, line 30) and elevation data for a plurality of ground stations simultaneously (multiple terminals, multiple stations, thus multiple IP address: column 5, lines 14-22); identifying a desired ground station from the plurality of ground stations; and, providing range data for the desired ground station to a real time client (columns 5-6, lines 65-67 and 1-3, respectively).

Claim 8: A method as recited in claim 7 (column 5, lines 30, 52; multiple terminals, multiple stations, thus multiple IP address: column 5, lines 14-22; columns 5-6, lines 65-67 and 1-3, respectively) wherein the step of identifying comprises the step of generating a range server name (multiple terminals, multiple stations, thus multiple IP address: column 5, lines 14-22) and generating a tracking server name (tracking inherent normal data collection between orbiter and ground: column 6, lines 62-63; multiple terminals, multiple stations, thus multiple IP address: column 5, lines 14-22)

Claim 9: A method as recited in claim 7 (column 5, lines 30, 52; multiple terminals, multiple stations, thus multiple IP address: column 5, lines 14-22; columns 5-6, lines 65-67 and 1-3, respectively) wherein the step of identifying further comprises in response to the step of generating a range server name (multiple terminals, multiple stations, thus multiple IP address: column 5, lines 14-22) and tracking server name, generating server (column 3, lines 62-65) location parameters.

Claim 10: A method as recited in claim 7 (column 5, lines 30, 52; multiple terminals, multiple stations, thus multiple IP address: column 5, lines 14-22; columns 5-6, lines 65-67 and 1-3, respectively) further comprising the step of generating a connection (column 4, lines 29-42) to one of the plurality of simulated ground stations.

Claim 11: A method as recited in claim 7 (column 5, lines 30, 52; multiple terminals, multiple stations, thus multiple IP address: column 5, lines 14-22; columns 5-6, lines 65-

67 and 1-3, respectively) wherein the step of requesting comprises the step of requesting a connection (column 4, lines 29-42) to the multiple ground stations, wherein each ground station has a unique port address (multiple terminals, multiple stations, thus multiple IP address: column 5, lines 14-22).

Claim 12: A method as recited in claim 8 (column 5, lines 30, 52; multiple terminals, multiple stations, thus multiple IP address: column 5, lines 14-22; columns 5-6, lines 65-67 and 1-3, respectively) wherein the step of generating a range server name comprises generating the range server name in response to the unique port address and wherein the step of generating a tracking server name comprises generating the tracking server name in response to the unique port address (multiple terminals, multiple stations, thus multiple IP address: column 5, lines 14-22).

Claims 13: A spacecraft emulation system comprising: a spacecraft status and control client (abstract); an interface coupled to the spacecraft status and control client for generating identification information for a desired ground station; a range data generator for generating range data for a plurality of ground stations (multiple terminals, multiple stations, thus multiple IP address: column 5, lines 14-22); and, a range server coupled to the range data generator (column 4, lines 29-42; tracking inherent to the daily routine between ground station and orbiter: column 6, lines 61-64) and spacecraft status and control client having the range data for said plurality of ground stations therein, said range server providing range data to said spacecraft status and control client (column 6, lines 65-67).

Claim 14: A spacecraft emulation system as recited in claim 13 (abstract; multiple terminals, multiple stations, thus multiple IP address: column 5, lines 14-22; column 6, lines 65-67) further comprising a tracking server coupled elevation and attitude (column 5, line 31) data generator and the spacecraft status and control client (column 3, lines 50-67), the tracking server providing elevation and azimuth data to said spacecraft status and control client (tracking=simulated system dynamics, column 6, lines 37-45).

Claim 15: A spacecraft emulation system as recited in claim 13 (abstract; multiple terminals, multiple stations, thus multiple IP address: column 5, lines 14-22; column 6, lines 65-67; column 3, lines 50-67; tracking=simulated system dynamics, column 6, lines 37-45) wherein said interface, range data generator, range server, tracking data generator and tracking server are coupled within a single unit (tracking=simulated system dynamics, column 6, lines 30-45).

Section III: Response to 102(e)

Applicants are thanked for addressing this issue; however, arguments are non-persuasive to negate the rejection. Anyone well versed in the art of the Internet would know TCP/IP (Gold: column 3, line 64) is an integral part of servers. The Gold reference teaches TCP/IP functions (Gold: column 3, line 64) which would be coupled to a server or servers, thus Gold, by association, does teach servers. Furthermore, the ground stations would have a plurality of unique range server names with unique port addresses.

To state the Gold's lack of teaching of "instantiating", in other words, "an abstract concept" of a range sever dedicated to a single ground station is immaterial based on semantics since Gold does discloses simulation "virtual scenario." Furthermore, applicants admit that range serves are located globally suggest a plurality of ground stations which must communicate airborne platforms or a plurality of platforms.

Rejection stands.

Citation to Relevant Prior Art

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Durst et al., "TCP Extension for Space Communications" 1997 ACM pg.389-403; teaches methods involving space communication and mobile wireless communications environments.

Buckley-B., "Spacecraft Simulation with a Re-Usable Smart Control System" 1999 Barrios Technology Inc. pg. 1-11; teaches spacecraft simulation for the Strategic Defense Initiative (SDI).

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Tom Stevens whose telephone number is 571-272-3715, Monday-Friday (8:00 am- 4:30 pm EST).

If attempts to reach the examiner by telephone are unsuccessful, please contact examiner's supervisor Mr. Paul Rodriguez 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.. Answers to questions regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) (toll-free (866-217-9197)).

July 11, 2006

TS


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